

# Lunch Bunch

## A Food Grading and Trading App for Kids

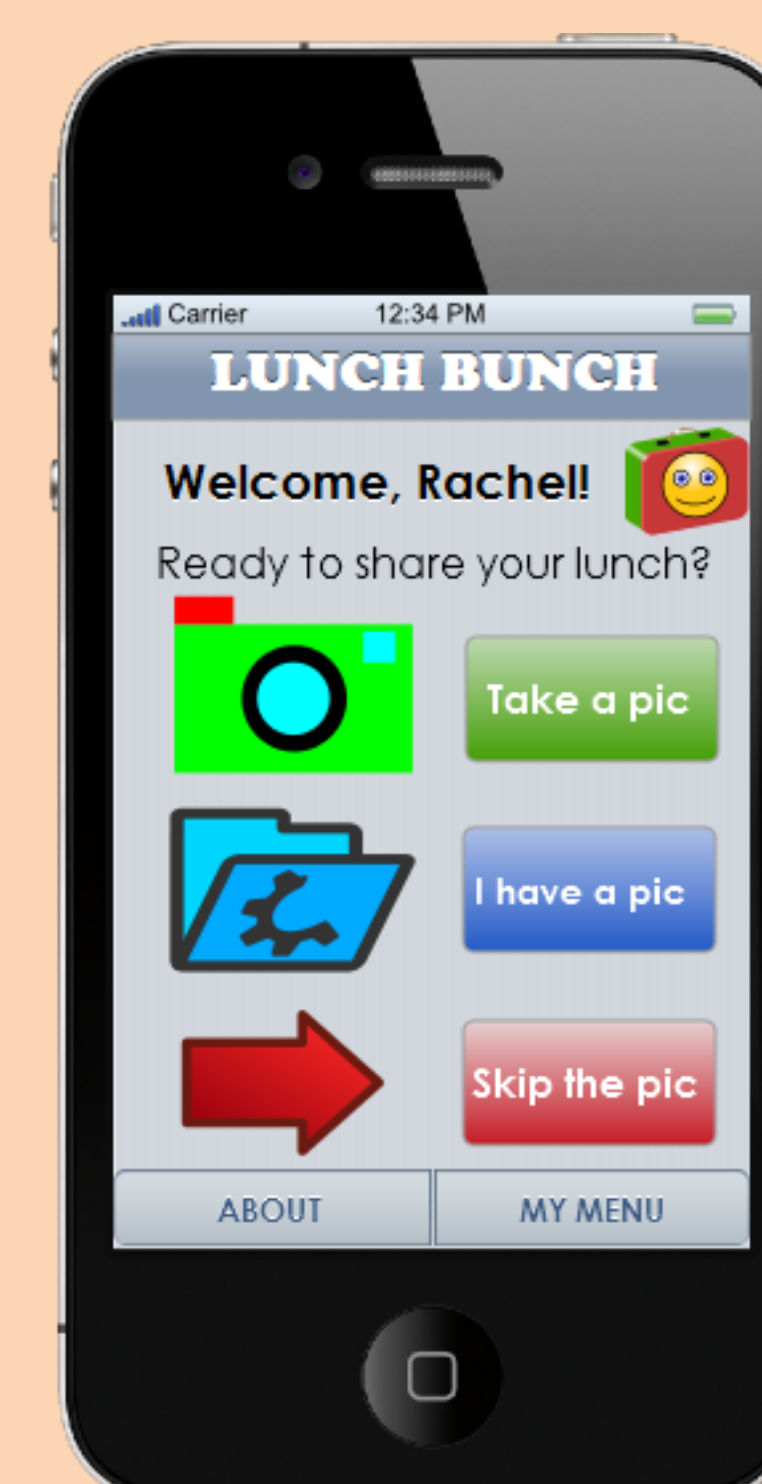
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### INTRODUCTION

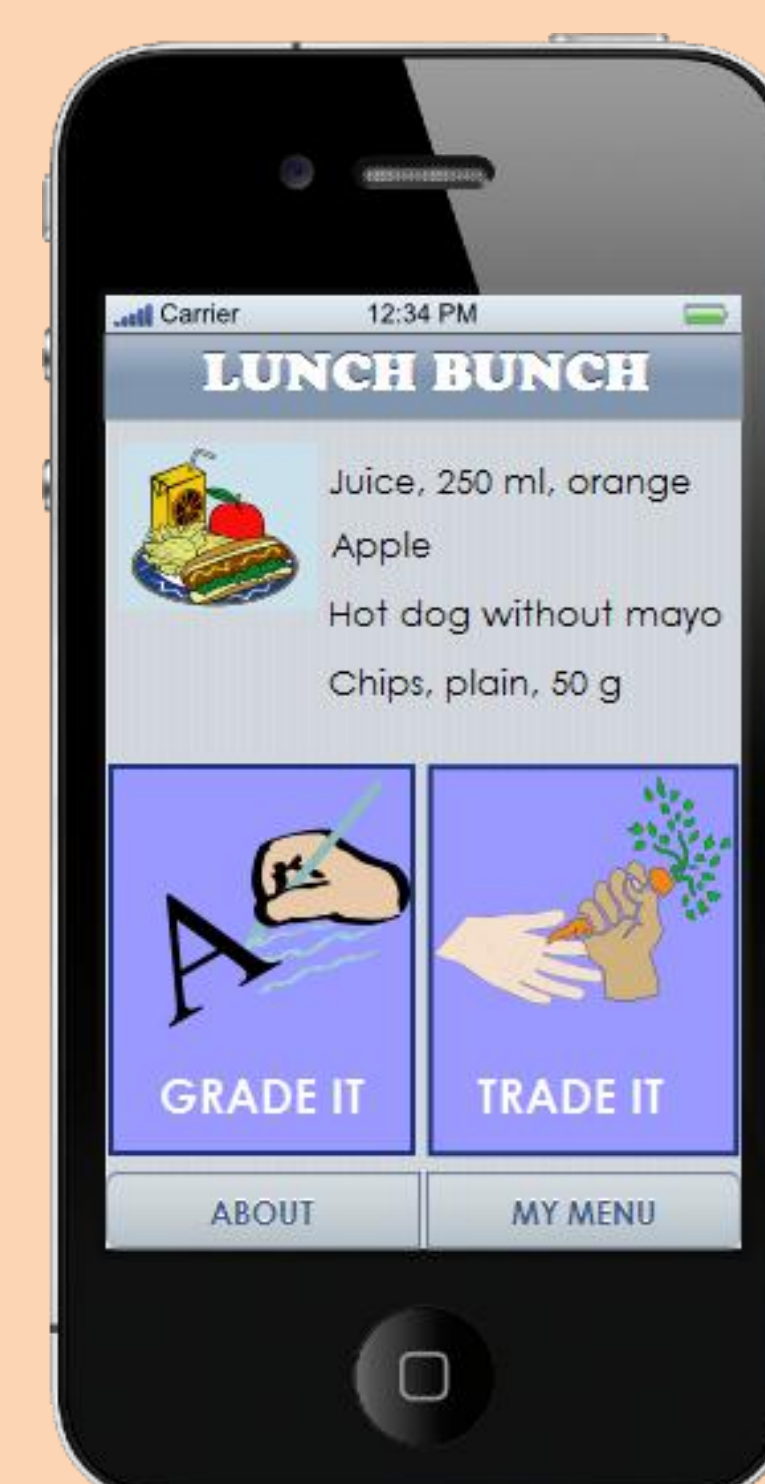
Presented here is a prototype for Lunch Bunch, an application for cross-platform mobile devices and desktop operating systems. Its intended audience is school-age children aged 6 to 17 years, with expected usage weighted towards the middle-school age bracket.

Lunch Bunch is a food trading and grading system that incorporates elements of **social media**, online **marketplace trading**, **nutritional analysis**, and rewards-based **gaming**. Through it, users can :

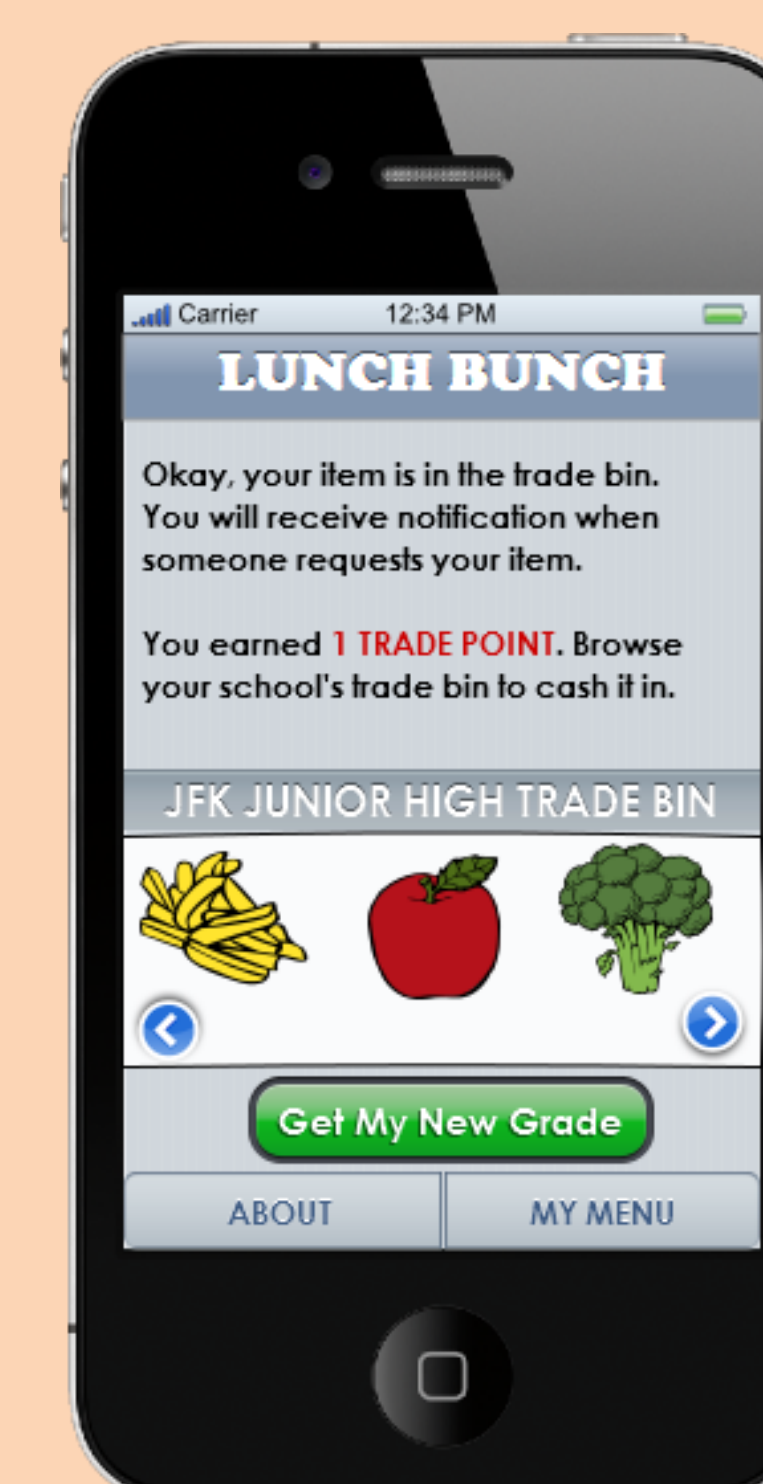
- **Create a profile** that displays a history of lunch grades and food-item swaps;
- **Receive a nutritional rating** of the food items they have brought to school for lunch;
- **Trade food items** from their lunch with classmates;
- **Provide an opinion** of whether or not they enjoyed their lunch; and
- **Inform parents** of their ratings and trade history (optional)



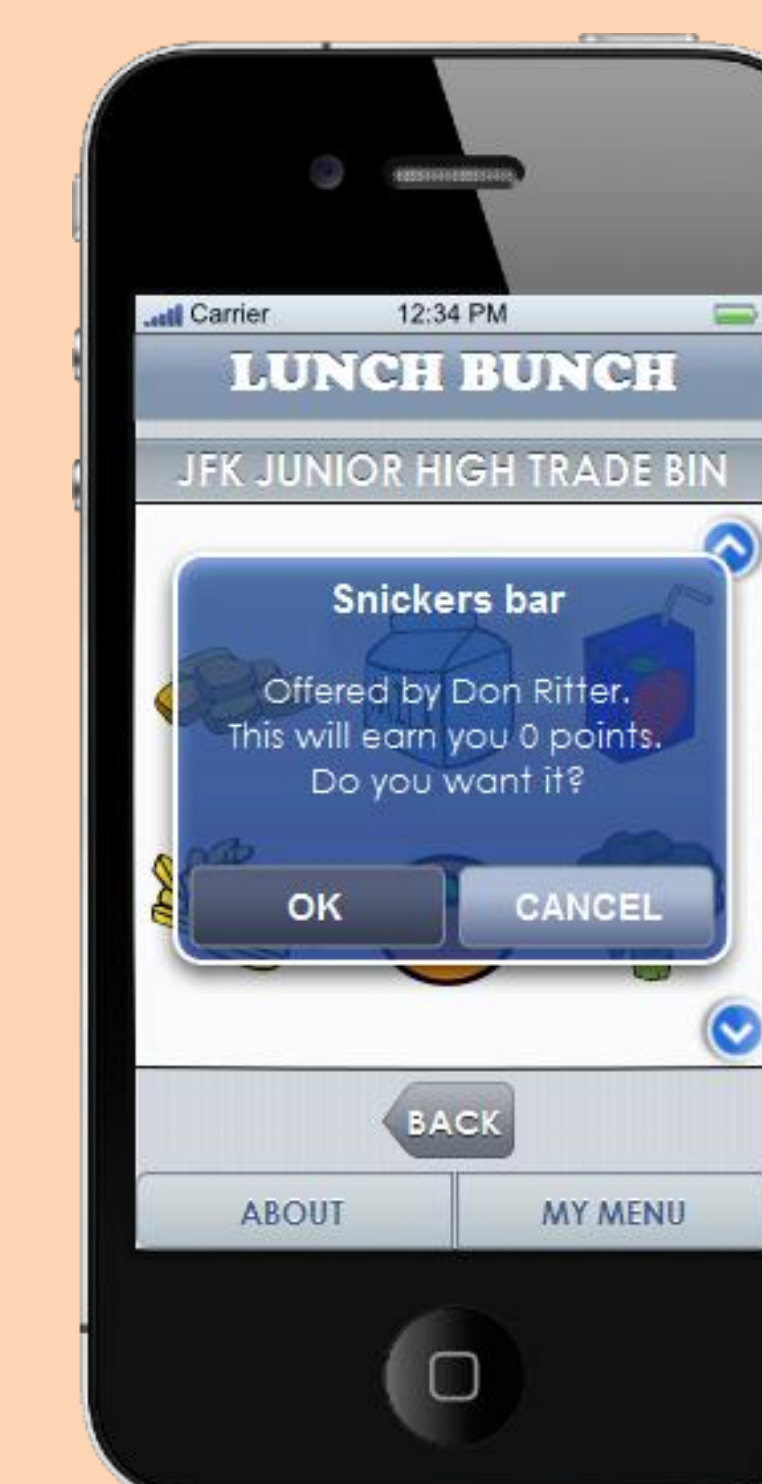
Welcome screen: User can share a picture of their lunch.



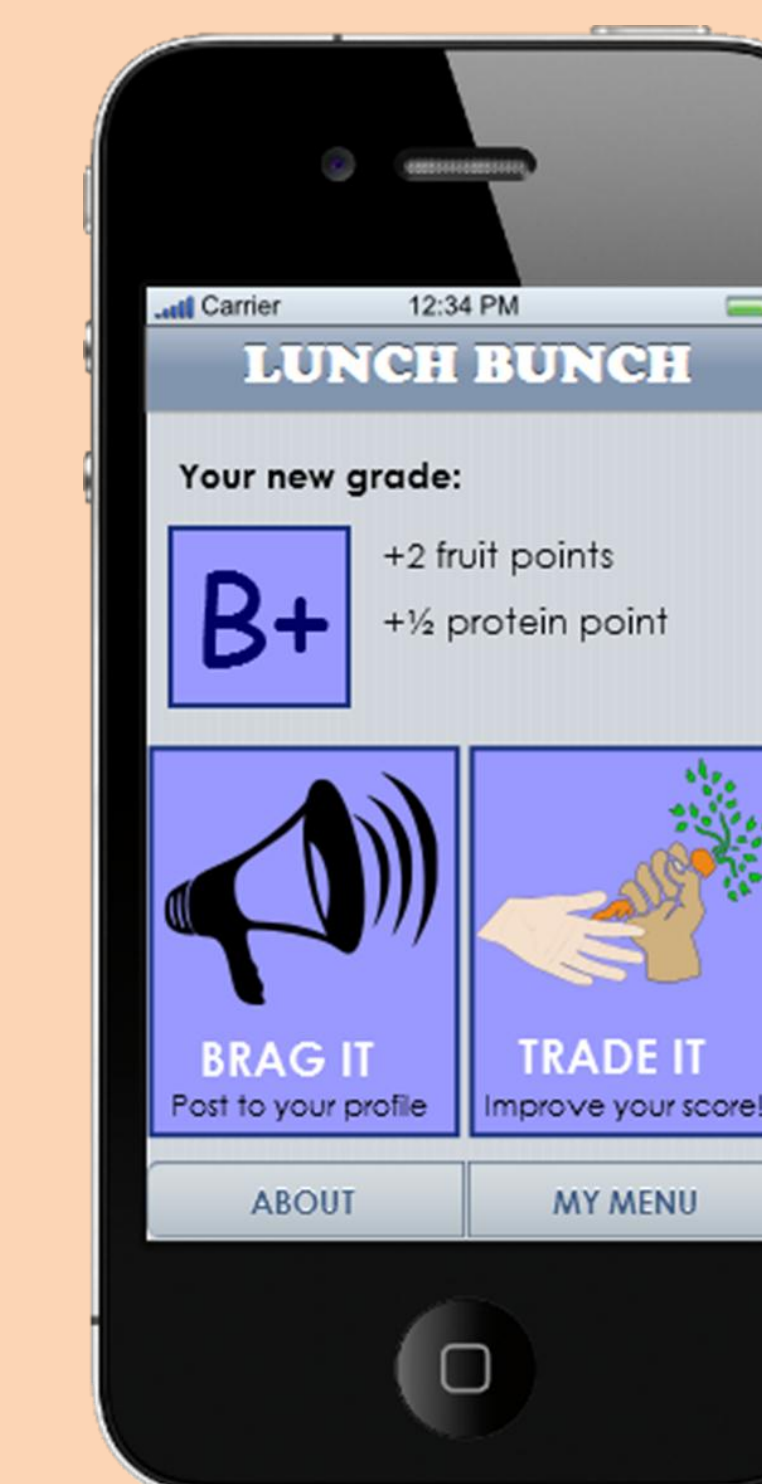
Post-ingredient entry: User chooses to trade or grade.



Post-"sell" screen: User chooses to buy or get grade.



User selects an item from the trade bin.



User gets a grade and can trade again or post to profile.



Profile of users' trades, grades, rankings, badges

### INSPIRATION

Approximately one-third of North American children and adolescents are **overweight or obese**<sup>1</sup>. As seen in policy initiatives and popular culture, there is increasing focus on teaching children the importance of food choices and how to foster a balanced diet of fresh, healthy food (e.g., **Michelle Obama's Let's Move!** campaign)<sup>2</sup>.

Meanwhile, the burgeoning **mobile health industry** is attempting to decrease long-term health-care costs by supporting public health and medicine with mobile devices<sup>3</sup>, and an app such as Lunch Bunch would fit into this field as a youth-targeted nutrition tool that aims to decrease adolescent obesity.



When entering the ingredients of their lunches, users select from food items that are distinguished by portion size.

### DESIGN APPROACH & THEORETICAL BASIS

The design approach for Lunch Bunch was mainly influenced by **user-centred design** principles, in that the decision-making process was grounded in how the users were perceived as interacting with the app<sup>4</sup>. **User personas** and **task maps** were created to help visualize this interaction. The free software application Pencil was used to create wireframes.

At the core of Lunch Bunch's purpose is behaviour modification theory and operant conditioning principles, as popularized by B.F. Skinner<sup>5</sup>. Reinforcements for eating a healthy diet are built into the system, in the form of intrinsic and extrinsic rewards: One receives good grades for bringing (or trading for) nutritious lunches, which in turn earns one badges and, if other students in the class or grade are invested, tangible rewards in the real world.



A user's profile page provides easy access to various reward dimensions: grades, badges, and potential prizes to grades or classes.



"Sometimes I want to trade my lunch but am too afraid to go up to someone."

- 12 years old
- Grade 7 student
- Quiet, shy
- Has sweet tooth
- Has second-hand iPhone
- Concerned about disappointing parents

User personas were created to help envision the goals and behaviours of potential users.

### DISCUSSION & IMPLICATIONS

Readers may note an inherent tension between the current inconsistent permissibility of mobile devices in primary schools and the ubiquitous use that his app necessitates. However, trends indicate both a surge in cell-phone ownership among the middle-school age bracket<sup>6</sup> and a growing acceptance of mobile-device use in classrooms<sup>7</sup>, with the norm of adolescents' personal use during school hours arguably inevitable.

In creating an information system with the capability of facilitating real-life food choices in a fun, socially connected manner, my hope is that it will foster a more engaged, conscious connection with food among users. Through this consciousness and active engagement, young people's agency and empowerment – along with health – will hopefully grow. It's also possible that policy makers and school board members could use food-consumption data gathered by this app to draw empirical connections between diet and academic performance.

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